Operationally Defining Behavior: Target and replacement behaviors

Functional assessment-based interventions focus on at least two behaviors of interest: the target and replacement behavior, which need to be defined. In this video we describe each behavior, and a process for how to operationally defining a behavior.

The first behavior of interest is the **target behavior**. This is the behavior of concern that is selected for intervention and is sometimes referred to as the problem behavior. The target behavior is expected to increase or decrease as a result of implementing the functional assessment-based intervention. The target behavior is identified during the Teacher Interview. The target behavior is used throughout the functional assessment to guide additional interviews and direct observations. Focusing on one (or in some cases two), target behaviors guide educators in identifying the function(s) of the target behavior to centralize the intervention on the specific behavior.

The second behavior of interest is the **replacement behavior**. This is a behavior that is socially valid and will result in the student’s needs being met – in other words what behavior can the student do instead of the target behavior that typically serves the same function (otherwise known as functionally equivalent). In brief, we want to empower the student to acquire new, socially valid behaviors that will help them to get their needs met in a more constructive way and to help them enjoy life more fully.

Before a behavior can be assessed and analyzed it is important to operationally define the behavior.

An **operational definition of behavior** describes what the behavior or behaviors of interest look like in a way that is observable, measurable, and repeatable.

A behavior has validity only if it enables observers to capture what the behavior is and what it is not. As such there should be four elements to operationally defining a behavior. These include a **label**, **definition**, **examples**, and **non-examples**.

For example, consider off task behavior as a target behavior. This might be operationally defined as “attending to activities in class other than assignments” as illustrated by Cox and colleagues (2011). Examples included playing with materials inappropriately, talking to peers, putting his head on the desk, drawing, and looking around the room. Nonexamples included completing assignments, using materials only for assignments, and watching the teacher during instruction” (p. 45).

In this same article, academic engagement is identified as the replacement behavior. This was operationally defined as any time the student “attended to class instructions or assignments. Examples included completing assignments, using materials only for assignments, and watching the teacher during instruction. Nonexamples included playing with materials inappropriately, talking to peers, putting head on the desk, drawing, and looking around the room” (p. 45).

A behavior is operationally defined when it provides an opportunity to obtain **complete information about a behavior’s occurrence** - or examples - and nonoccurrence - or non-examples. This means that
two people could independently observe the student’s behavior and agree when the behavior is and is not happening.

When an operational definition of behavior is drafted, such as for the target or replacement behavior. One rule of thumb to help evaluate its completeness is the *dead man’s test*.

The **dead man’s test** is a rule of thumb for deciding if something is a behavior. The question poses, “*can a dead man do it?*” If a dead man can do it, it is not a behavior; and if a dead man cannot do it, then it is a behavior – for example.

Can a dead man lay still? Yes. Can a dead man *not walk around the room*? Yes. Can a dead man *not pay attention*? Yes.

Here are some examples….

Examples of behavior include: sleeping, getting out of seat, talking, and looking away from speaker. We know these are behaviors because a dead man could not do any of these behaviors.

Examples of non-behavior include: being quiet, not eating candy and not responding. These examples are not behaviors because a dead man could do them and they are not readily observable.

To learn more about operationally defining target and replacement behaviors you may review *Applied Behavior Analysis (2nd edition)* by Cooper, Heron and Heward (2007) and *Functional Behavior Assessment and Function-Based Intervention: An Effective, Practical Approach* by Umbreit, Ferro, Liaupsin, and Lane (2007).